AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (currently amended): A connector chip for electrically connecting a conductive contact pin thereto, comprising:

a nonconducting top layer;

a nonconducting bottom layer;

a conductive sheet situated between the top layer and the bottom layer; and

a passageway extending at least partially through the chip, the passageway including ~~resiliently biasing~~ flexible cantilever means for holding the pin in contact with the sheet and for restraining the pin from translating with respect to the chip, said flexible cantilever means being curvilinearly deflectable by the pin so as to produce a normal force against a lateral side of the pin and an associated frictional force which resists withdrawal of the pin from the passageway.

Claims 2 and 3 (canceled)

Claim 4 (currently amended): The electrical connector chip as defined in Claim ~~2~~ 1 wherein:

the flexible cantilever means is a plurality of fingers formed from the sheet and extending centripetally into the passageway to respective unsupported ends, and

the passageway includes an opening through the sheet~~; and~~ formed by the plurality of unsupported ends, with the opening ~~has~~ having a breadth that ~~increases when the pin is~~ varies responsive to the contact pin being inserted therethrough.

Claim 5 (previously presented): The electrical connector chip as defined in Claim 4 wherein:

the passageway is further comprised of a top hole through the top layer, and a bottom hole through the bottom layer; and the top hole, the bottom hole and the opening are aligned.

Claims 6 and 7 (canceled)

Claim 8 (currently amended): The electrical connector chip as defined in Claim ~~7~~ 5 wherein:

the breadth varies between an unstressed minimum breath and a stressed breath, with the stressed breath being greater than the unstressed minimum breath;

the contact pin has a diameter greater that the unstressed minimum breadth; and

the breadth increases to the stressed breadth in response to the contact pin being inserted into the opening.

Claim 9 (canceled)

Claim 10 (previously presented): The electrical connector chip as defined in Claim 8 wherein:

the top hole has a top hole diameter and the bottom hole has a bottom hole diameter; and

the top hole diameter is smaller that the bottom hole diameter.

Claim 11 (previously presented): The electrical connector chip as defined in Claim 1 comprising means for preventing rotation of the pin with respect to the chip.

Claim 12 (previously presented): The electrical connector chip as defined in Claim 1 further comprising:

a plurality of passageways through the chip; and

a harness including a plurality of the pins spatially arranged so that each of the pins can be simultaneously aligned with one of the passageways, respectively, whereby

all of the pins can be simultaneously inserted into passageways, respectively, and

the harness is prevented from translating or rotating relative to the chip by the holding means when the contact pins are respectively inserted into the passageways.

Claim 13 (currently amended): The electrical connector chip as defined in Claim 12 wherein:

each ~~resiliently-biasing holding~~ cantilever means is electrically isolated from the other ~~resiliently-biasing holding~~ cantilever means and is electrically connected to a respective chip element, whereby

each chip element is electrically connected to a respective contact pin when the contact pins are respectively inserted into the passageways.

Claim 14 (previously presented): The electrical connector chip as defined in Claim 1 wherein:

the chip is from 0.5 to 2.0 millimeters thick; and

the sheet is from 0.05 to 0.2 millimeters thick.

Claim 15 (currently amended): A connector chip for electrically connecting a conductive contact pin thereto, comprising:

a nonconducting top layer;

a nonconducting bottom layer;

an electrical element; and

a conductive sheet situated between the top layer and the bottom layer, and being electrically connected to the element;

the top layer having a top hole therethrough, and the bottom layer having a bottom hole therethrough, with the top hole and the bottom hole being in alignment and comprising an aligned hole pair;

the sheet having a plurality of flexible cantilevered fingers each centripetally extending to respective unsupported ends to form an opening aligned with the aligned hole pair, and each being curvilinearly deflectable by the pin when inserted into the opening, with said unsupported ends applying a normal force against the pin when curvilinearly deflected, for generating a frictional force which resists withdrawal of the pin and holds; ~~and the opening~~

~~including resiliently biasing means for holding~~ the pin in contact with the sheet ~~when the pin is inserted into the opening~~, whereby

the pin is prevented from translating with respect to the chip and an electrical connection between the pin and the element is established and maintained.

Claim 16 (previously presented): The electrical connector chip as defined in Claim 15 wherein:

the chip is from 0.5 to 2.0 millimeters thick; and

the sheet is from 0.05 to 0.2 millimeters thick.

Claim 17 (currently amended): The electrical connector chip as defined in Claim 15 comprising:

a plurality of the aligned hole pairs and openings; and

a harness including a plurality of the pins spatially arranged so that each of the contact pins can be simultaneously aligned with one of the aligned hole pairs and openings, whereby

each of the contact pins can be simultaneously inserted into one of the aligned hole pairs and openings, respectively, and

the harness is held stationary relative to the chip by the ~~resiliently-biasing holding means~~ flexible cantilevered fingers when the pins are inserted.

Claim 18 (currently amended): A method for electrically connecting a chip and a conductive contact pin, comprising mechanically holding the pin in a passageway in the chip by the ~~cantilevered~~ curvilinear deflection of a ~~resiliently-biasing~~ flexible cantilever means when the pin is inserted into the passageway wherein the curvilinear deflection of the flexible cantilever means produces a normal force against the pin and an associated frictional force to resist withdrawal of the pin, and wherein the mechanical hold establishes and maintains an electrical connection between the pin and an electrical element embedded in the chip.

Claims 19 and 20 (canceled)

Claim 21 (currently amended): The connecting method recited in Claim ~~20~~ 18 additionally providing the chip with a ~~resiliently-biasing~~ flexible conductive sheet electrically connected to the electrical element and having a plurality of flexible cantilevered fingers centripetally extending to respective unsupported ends to form an opening aligned with the passageway, wherein the electrical connection is maintained and the normal force is applied by inserting the pin into the opening and ~~cantileverly~~ curvilinearly deflecting the opening.

Claim 22 (original): The connecting method recited in Claim 21 comprising:

providing a plurality of passageways and openings; and

attaching a plurality of the pins to a rigid harness and spatially arranging the pins so that each of the pins can be simultaneously inserted into one of the passageways and the opening aligned therewith.

Claim 23 (currently amended): A connector of a chip of a type having a passageway extending at least partially therethrough, for electrically connecting a conductive contact pin to the chip, the connector comprising:

a conductive sheet having a peripheral portion connected to the chip adjacent the passageway, and ~~resiliently biasing~~ flexible cantilever means extending from the peripheral portion into the passageway to at least one unsupported end, said flexible cantilever means being curvilinearly deflectable by the pin so as to produce a normal force against the pin and an associated frictional force which resists withdrawal of the pin from the passageway for holding a pin in contact with the sheet and for restraining the pin from translating with respect to the chip.

Claims 24 and 25 (canceled)

Claim 26 (currently amended): The electrical connector as defined in Claim ~~24~~ 23 wherein:

~~the resiliently biasing holding means includes~~ the flexible cantilever means is a plurality of fingers formed from the sheet and extending centripetally into the passageway to respective unsupported ends to form an opening through the sheet; and

the opening has a breadth that ~~increases when the pin is~~ varies responsive to the contact pin being inserted therethrough.

Claims 27 and 28 (canceled)

Claim 29 (previously presented): The electrical connector as defined in Claim ~~28~~ 26 wherein:

the breadth varies between an unstressed minimum breath and a stressed breath, with the stressed breath being greater than the unstressed minimum breath;

the contact pin has a diameter greater that the unstressed minimum breadth; and

the breadth increases to the stressed breadth in response to the contact pin being inserted into the opening.

Claim 30 (canceled)

Claim 31 (previously presented): The electrical connector as defined in Claim 23 comprising means for preventing rotation of the pin with respect to the chip.

Claim 32 (previously presented): The electrical connector as defined in Claim 23 wherein:

the sheet is from 0.05 to 0.2 millimeters thick.